

ASAP

SHIP TO EAGLE 12/07

Work Order ID 50068

July 7, 2009 2:27:32 PM

Page 1

Item ID: D3936-1  
Revision ID: A-PRELIM  
Item Name: Outside

Accept

Setup Start

Stop

Start Date: 7/08/09 Start Qty: 1.00  
Required Date: 7/10/09 Req'd Qty: 1.00

Cust Item ID:  
Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D3936

A-PRELIM

100

0.00



Waterjet

FLOW CNC Waterjet

Memo

0.00

1-Cut as per Dwg D3936

Dwg Rev: *A Prelim*

Prog Rev: *A Prelim*

2-Deburr if necessary

⇒ ml 09 07 08

PRELIMINARY ISSUE

110

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Quality Control

Memo

0.00

⇒ ml 09 07 08

6061.040 B# 111224 ml 09.07.08

# Work Order ID 50068

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Page 2

Item ID: D3936-1

Accept

Revision ID: A-PRELIM

Item Name: Outside

Start Date: 7/08/09 Start Qty: 1.00

Required Date: 7/10/09 Req'd Qty: 1.00


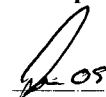



Reference:

Cust Item ID:

Customer:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start \_\_\_\_\_  
Stop \_\_\_\_\_

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120  QC Quality Control	QC8- Inspect parts - second check  Memo	0.00  0.00	<b>ENGINEERING APPROVAL</b>			2	0		 08.07.08
121  Brake NC Brake NC	Small fab  C'sink holes as per dwg  Memo	0.00  0.00				2	0		SB 09/07/09
130  QC Quality Control	Bend as per Dwg  Memo	0.00  0.00	<b>ENGINEERING APPROVAL</b>			1	1		SB 09/07/09
140  QC Quality Control	QC5- Inspect part completeness to step on W/O  Memo	0.00  0.00							

**ENGINEERING  
APPROVAL**

**Work Order ID 50068**

Page 3

July 7, 2009 2:27:32 PM

Item ID: D3936-1

Accept



Setup Start



Revision ID: A-PRELIM

Stop



Item Name: Outside

Start Date: 7/08/09 Start Qty: 1.00



Cust Item ID:

Required Date: 7/10/09 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run HoursDraw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

150

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

160

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

170

Identify as per dwg &amp; Stock Location: \_\_\_\_\_

0.00



Packaging

Memo

0.00

Packaging

**Work Order ID 50068**

Page 4

July 7, 2009 2:27:32 PM

Item ID: D3936-1

Accept



Setup Start



Revision ID: A-PRELIM

Stop



Item Name: Outside

Start Date: 7/08/09

Start Qty: 1.00



Cust Item ID:

Required Date: 7/10/09

Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals:

Process Plan: \_\_\_\_\_

Date: \_\_\_\_\_

Tooling: \_\_\_\_\_

Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_

Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_

Date: \_\_\_\_\_

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run HoursDraw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

180

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

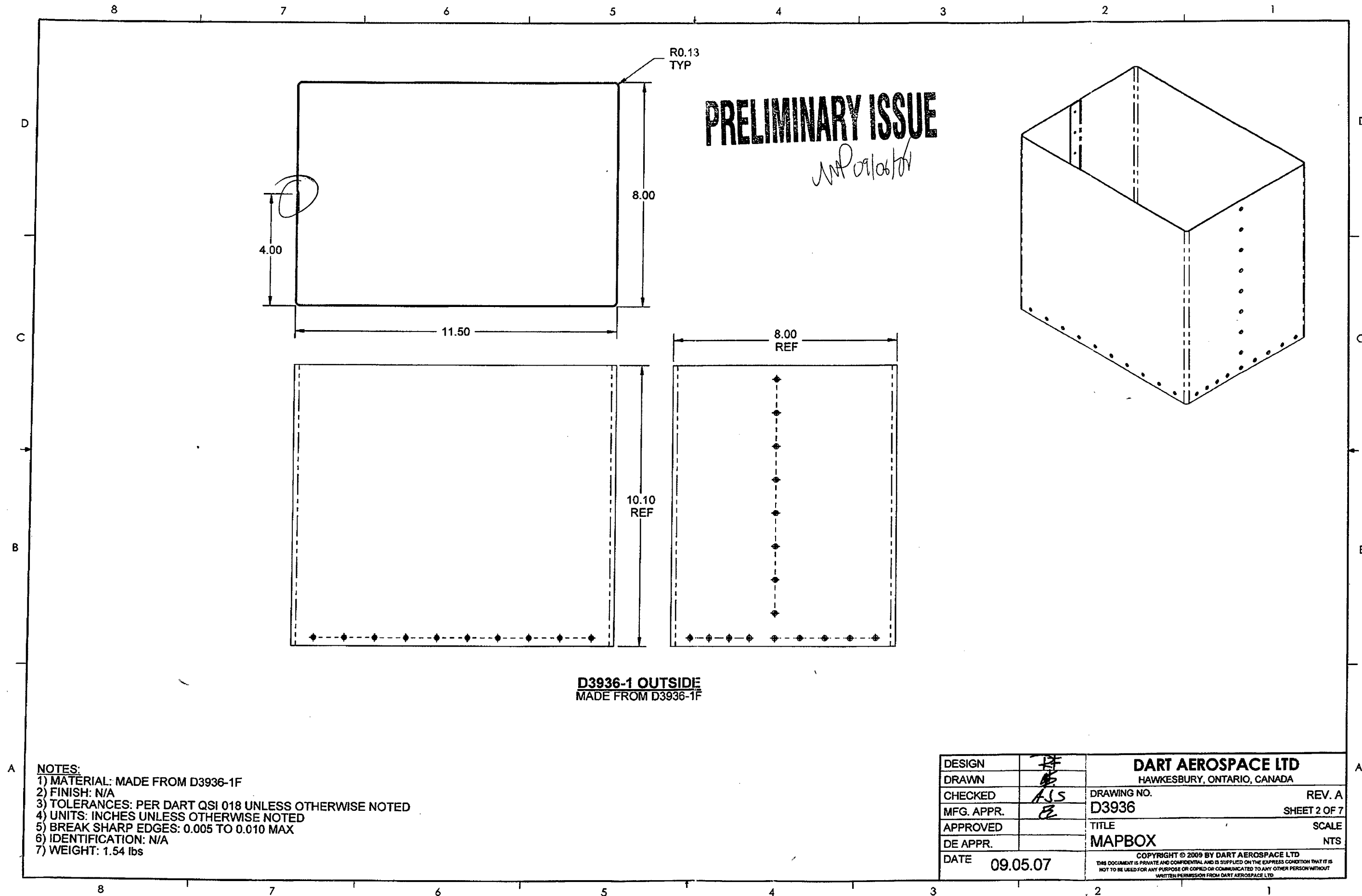
0.00

Quality Control

MF 09-07-09

TESTED & SCRAP  
PER ~~DAVID~~ S  
S  
Harvey S.





GRAIN  
DIRECTION

PRELIMINARY ISSUE

MAP 09/05/07

CSK  $\phi 0.179 \times 100^\circ$   
TYP 54 PL

$\phi 0.098$   
TYP 9 PL

8.40  
7 HOLES @  
1.20 PITCH  
3 PL

1.20  
0.30  
0

9.90  
9 HOLES @  
1.10 PITCH

3.60  
4 HOLES @  
0.90 PITCH

9.90  
9 HOLES @  
1.10 PITCH

2.70  
3 HOLES @  
0.90 PITCH

2.10  
3 HOLES @  
0.70 PITCH

2.10  
3 HOLES @  
0.70 PITCH

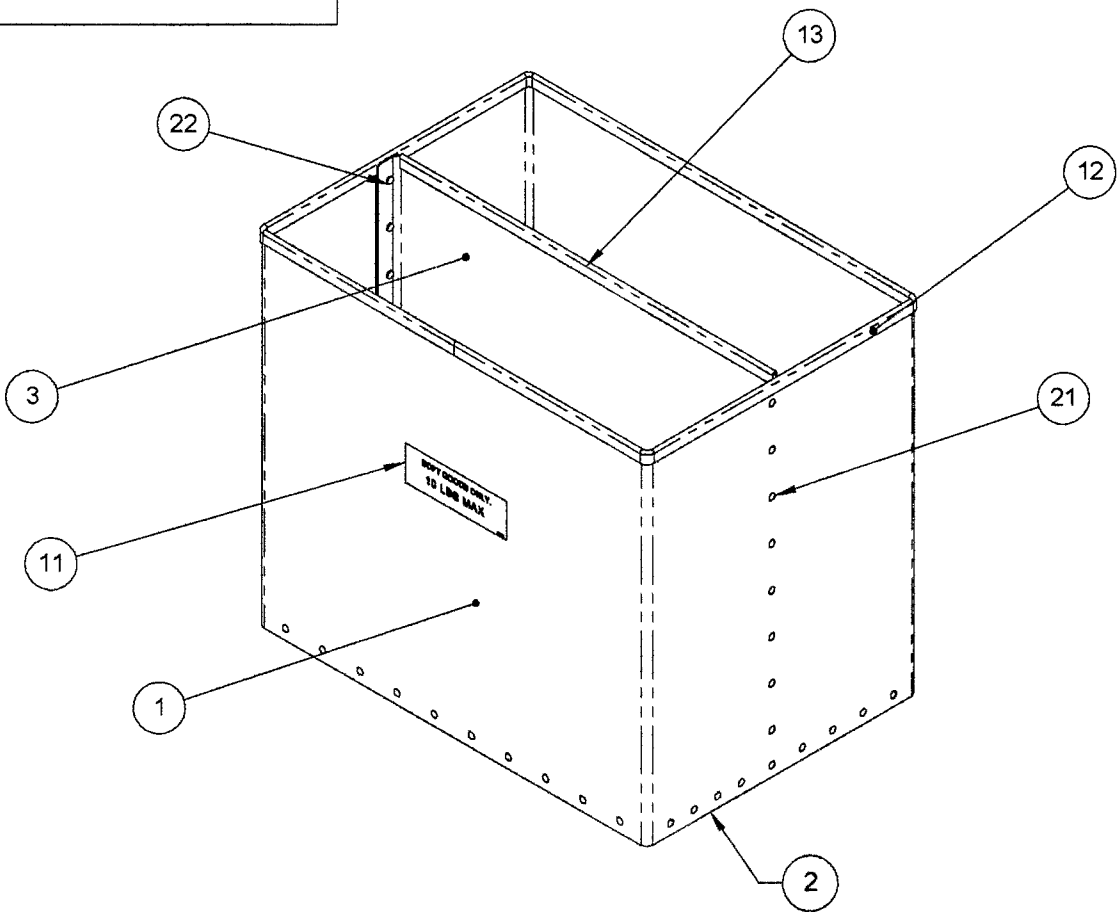
**D3936-1F OUTSIDE FLAT PATTERN**

**NOTES:**

- 1) MATERIAL: 6061-T6 (OR 6060-T62) ALUMINUM SHEET, 0.040 THICK  
PER AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027  
REF. DART SPEC M6061/T65.040
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 1.54 lbs

DESIGN	<del>1F</del>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	<del>AS</del>		
CHECKED	AS	DRAWING NO. D3936	REV. A
MFG. APPR.	BE		SHEET 3 OF 7
APPROVED		TITLE	SCALE
DE APPR.		MAPBOX	NTS
DATE	09.05.07	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

	PLACARD
	RUBBER CUSHION
	RUBBER CUSHION
13-4	RIVET
13-5	RIVET

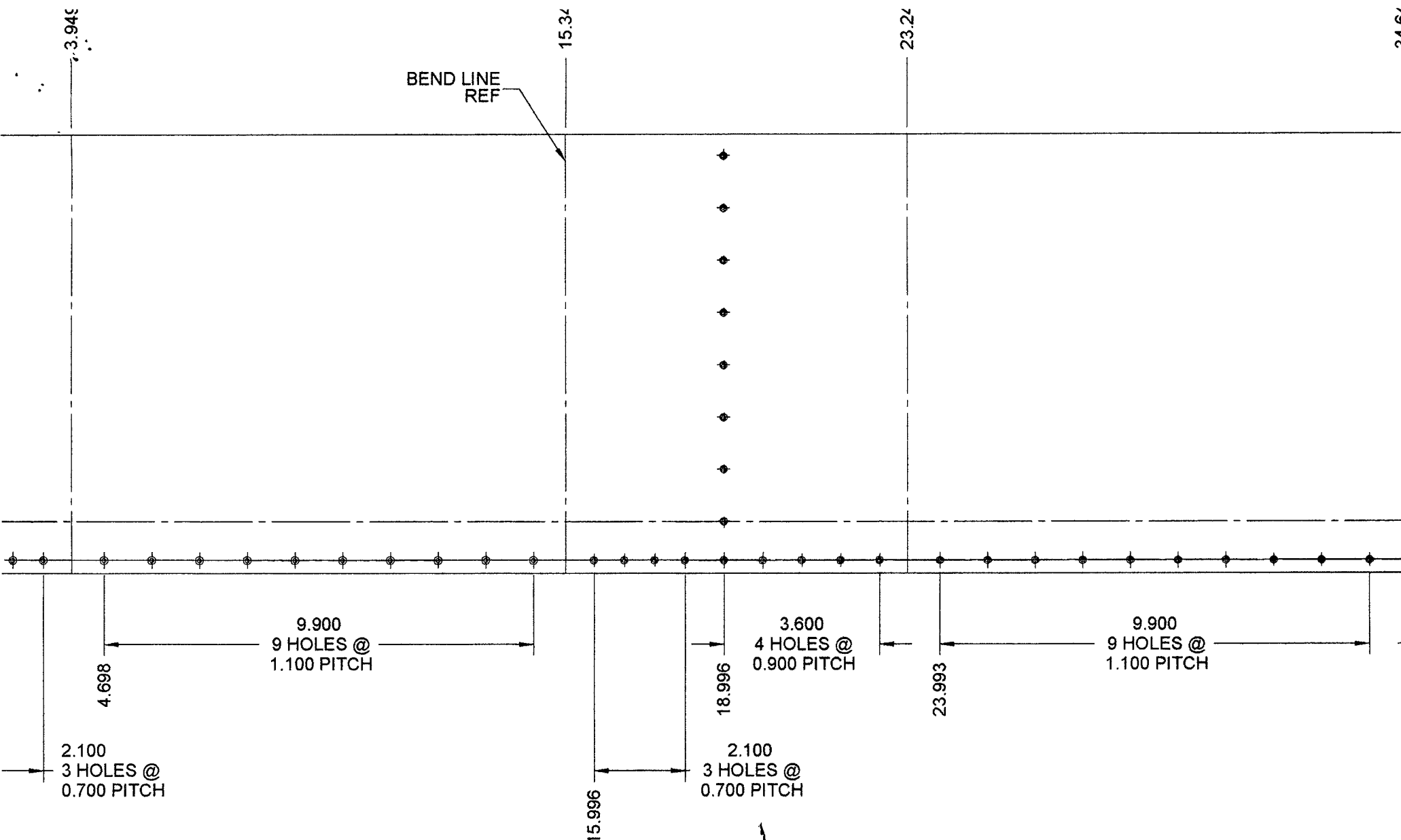


**D3936-041 MAPBOX ASSEMBLY**

REFERENCE ONLY

A	NEW ISSUE	
REV.	DESCRIPTION	
DESIGN		DRAWING
DRAWN		
CHECKED		



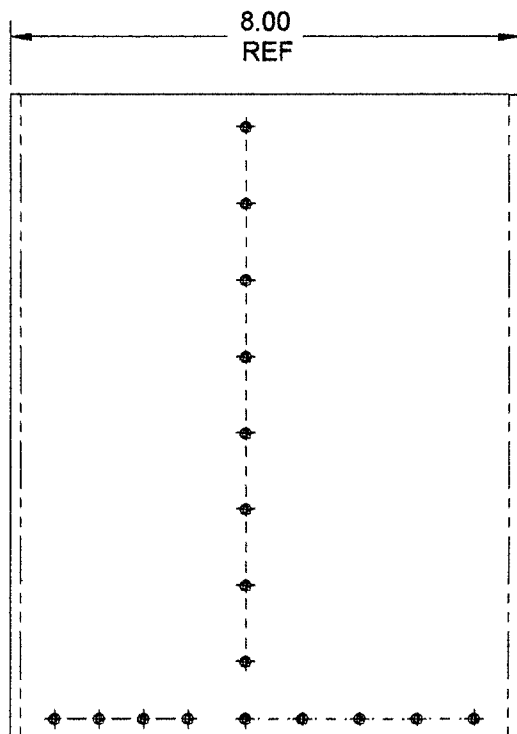
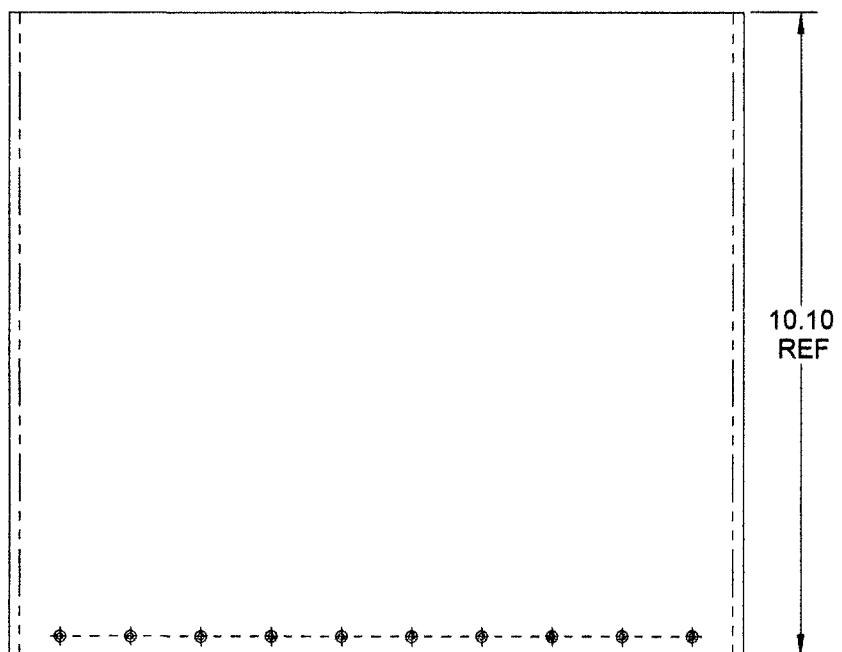
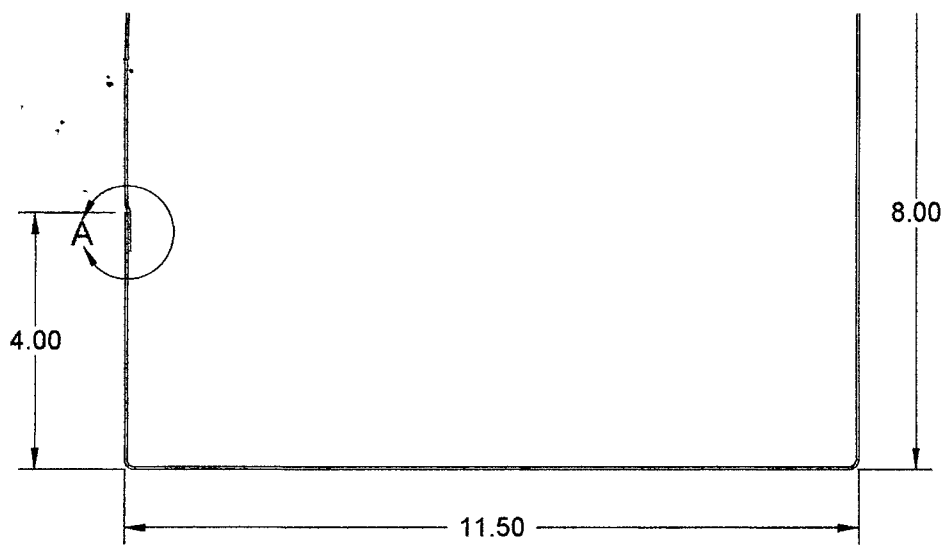


**D3936-1F OUTSIDE FLAT PATTERN**

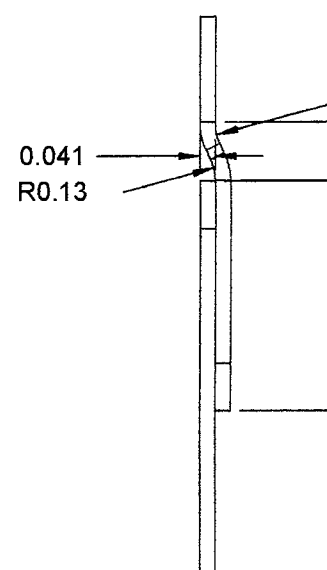
REFERENCE ONLY

2) ALUMINUM SHEET 0.040 THICK  
1 OR AMS 4025 OR AMS 4027  
061T6S.040)

DESIGN	<i>DF</i>	DRAWING
DRAWN	<i>DF</i>	
CHECKED	<i>DF</i>	



**D3936-1 OUTSIDE**  
MADE FROM D3936-1F

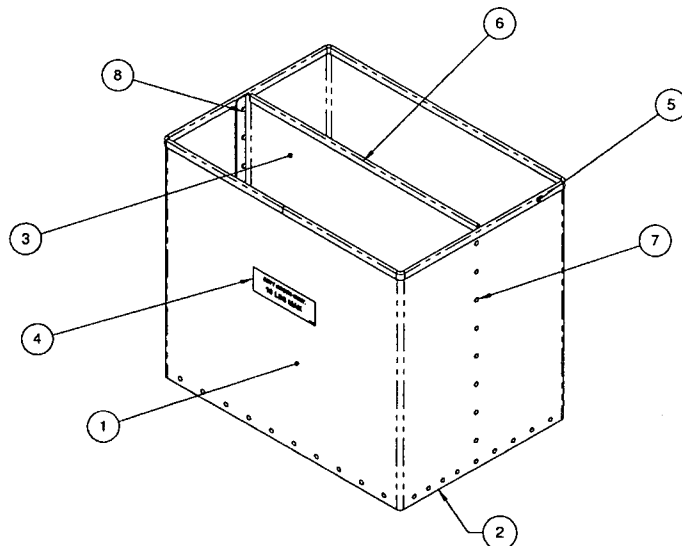


**DETAIL A**  
SCALE 5x

**REFERENCE ONLY**

DESIGN	<i>[Signature]</i>	DRAWING
DRAWN	<i>[Signature]</i>	
CHECKED	<i>[Signature]</i>	

ITEM NO.	QTY. -041	PART NUMBER	DESCRIPTION
1	1	D3936-1	SIDES
2	1	D3936-3	BOTTOM
3	1	D3936-5	DIVIDER
4	1	D3938-3	PLACARD
5	1	D3941-40	RUBBER CUSHION
6	1	D3941-12	RUBBER CUSHION
7	56	MS20426AD3-4	RIVET
8	8	MS20426AD3-5	RIVET



**D3936-041 MAPBOX ASSEMBLY**

**NOTES:**

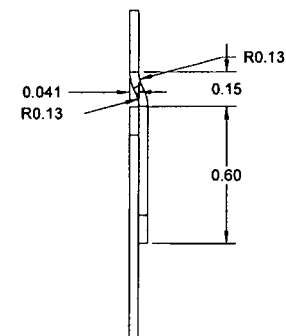
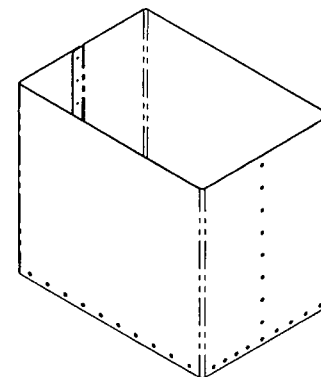
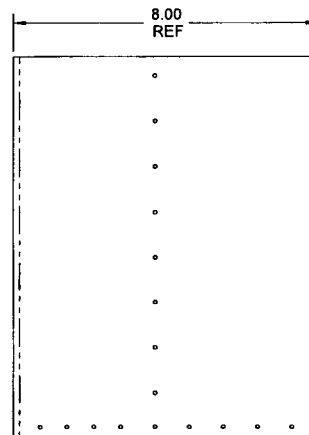
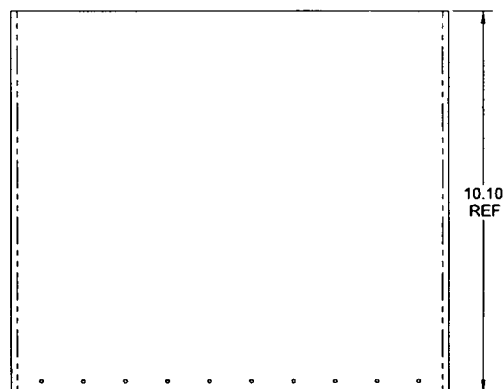
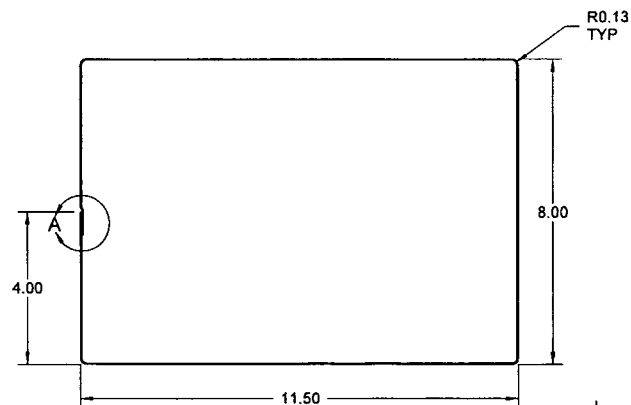
- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT "BLACK SANDTEX" (4.3.5.7) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3936-041" AND B/N USING A WHITE FINE POINT PAINT MARKER
- 7) WEIGHT: 2.54 lbs

**ASSEMBLY INSTRUCTIONS**

1. BEND D3936-1/-3/-5 PARTS PER SHEETS 2-7.
2. POSITION D3936-5 DIVIDER IN PLACE INSIDE THE D3936-1 SIDES AND CLECO IN PLACE.
3. POSITION THE D3936-3 BOTTOM IN PLACE AGAINST THE D3936-5 DIVIDER AND INSIDE THE D3936-1 SIDES.
4. TRANSFER DRILL 10X  $\phi 0.098$  (#40 DRILL) HOLES FROM THE D3936-3 BOTTOM TO THE D3936-5 DIVIDER. PLACE CLECOS IN TRANSFER DRILLED HOLES TO MAINTAIN ALIGNMENT AS THEY ARE DRILLED.
5. TRANSFER DRILL 38X  $\phi 0.098$  HOLES FROM D3936-1 SIDES TO D3936-3 BOTTOM. PLACE CLECOS IN TRANSFER DRILLED HOLES TO MAINTAIN ALIGNMENT AS THEY ARE DRILLED.
6. REMOVE ALL CLECOS AND COUNTERSINK 64X EXTERIOR HOLES  $\phi 0.179 \times 100^\circ$ . DEBURR ALL HOLES IN ALL PARTS.
7. REASSEMBLE PARTS USING CLECOS IN EVERY THIRD HOLE TO MAINTAIN ALIGNMENT.
8. RIVET D3936-1 SIDE TO D3936-5 DIVIDER USING MS20426AD3 RIVETS. INSTALL MS20426AD3 RIVETS RANDOMLY THROUGHOUT ASSEMBLY SO THAT ALL PARTS ARE DRAWN TOGETHER EVENLY.
9. RIVET D3936-5 DIVIDER TO D3936-3 BOTTOM USING MS20426AD3 RIVETS. INSTALL MS20426AD3 RIVETS RANDOMLY THROUGHOUT ASSEMBLY SO THAT ALL PARTS ARE DRAWN TOGETHER EVENLY.
10. RIVET D3936-3 BOTTOM TO D3936-1 SIDE USING MS20426AD3 RIVETS. INSTALL MS20426AD3 RIVETS RANDOMLY THROUGHOUT ASSEMBLY SO THAT ALL PARTS ARE DRAWN TOGETHER EVENLY.
11. POWDER COAT ASSEMBLY PER NOTE 2.
12. TEST FIT RUBBER CUSHION TO TOP EDGE OF MAPBOX. TRIM AS REQUIRED FOR PROPER FIT.
13. REMOVE RUBBER CUSHION.
14. APPLY SMALL BEAD OF SILICONE/ADHESIVE TO TOP EDGE OF MAPBOX.
15. SLIDE RUBBER CUSHION OVER EDGE AND PRESS INTO SILICONE/ADHESIVE.
16. WIPE OFF ANY EXCESS SILICONE/ADHESIVE BEFORE IT DRIES/CURES.
17. APPLY D3938-3 PLACARD AS SHOWN.
18. ALLOW SEALANT/ADHESIVE TO CURE/DRY 24 HRS BEFORE SHIPPING PART.

**RELEASED**  
2009-08-28

A	NEW ISSUE	BY	09.07.08
REV.	DESCRIPTION	BY	DATE
DESIGN	DESIGN	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	DRAWN	DRAWING NO.	REV. A
CHECKED	CHECKED	D3936	SHEET 1 OF 7
MFG. APPR.	MFG. APPR.	TITLE	SCALE
APPROVED	APPROVED	MAPBOX	NTS
DE APPR.	DE APPR.	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	
DATE	09.07.08		



DETAIL A  
SCALE 5x

D3936-1 SIDES  
MADE FROM D3936-1F

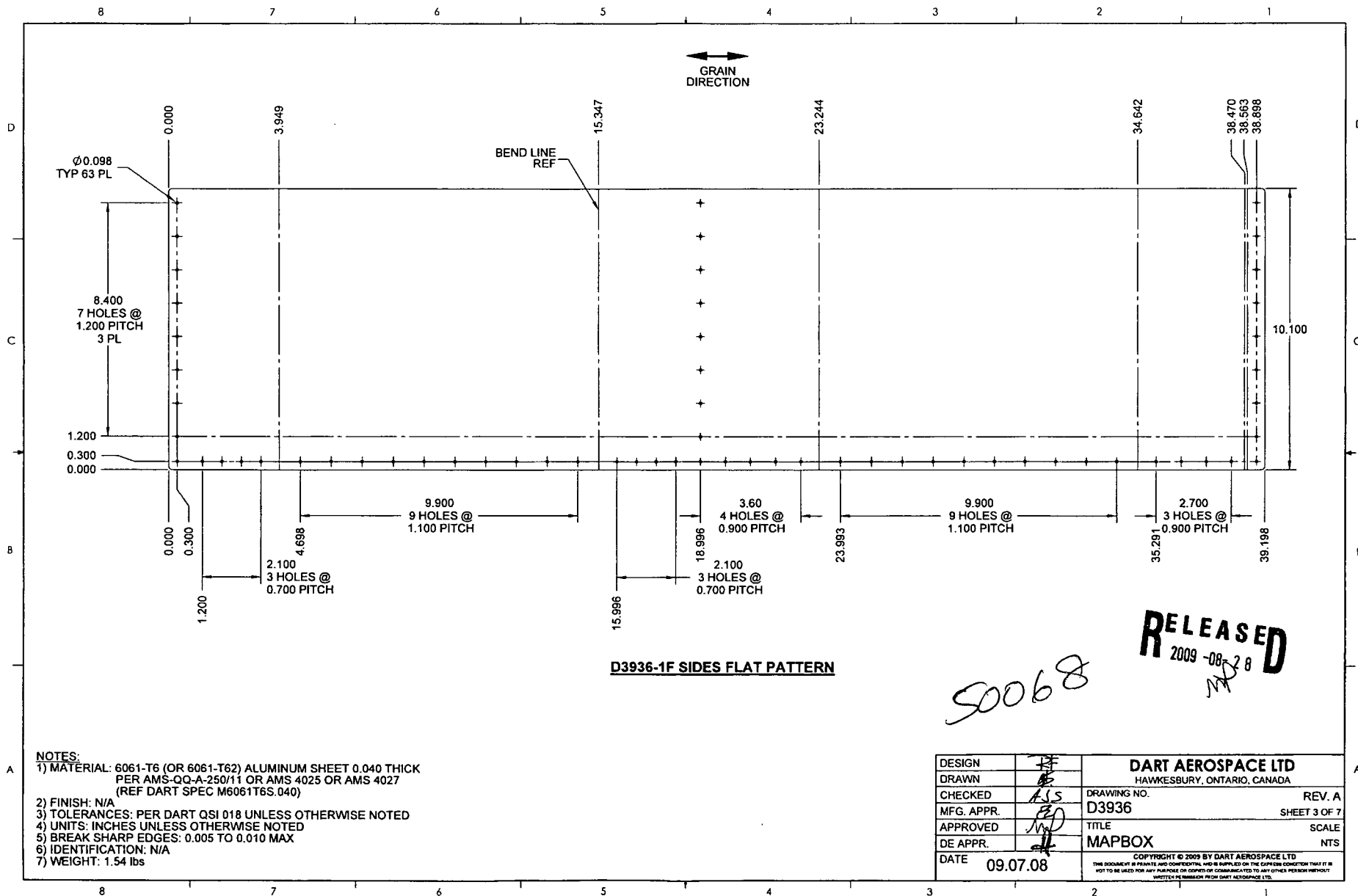
NOTES:

- 1) MATERIAL: MADE FROM D3936-1F
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 1.54 lbs

DESIGN	1F	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	AS		
CHECKED	AS	DRAWING NO. <b>D3936</b>	REV. A
MFG. APPR.	ED	SHEET 2 OF 7	
APPROVED	MT	TITLE <b>MAPBOX</b>	SCALE NTS
DE APPR.			
DATE	09.07.08	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

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2009-08-28  
MB

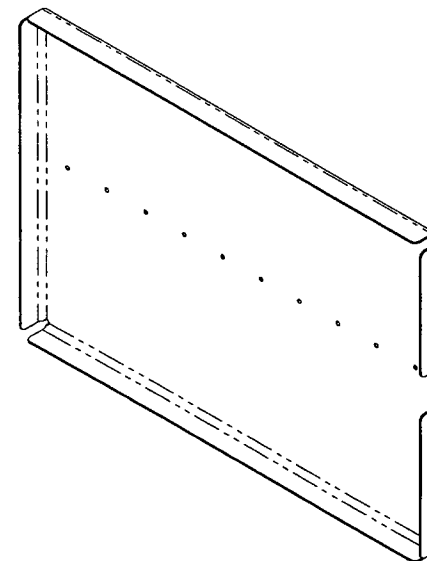
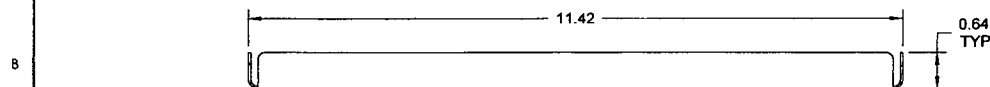
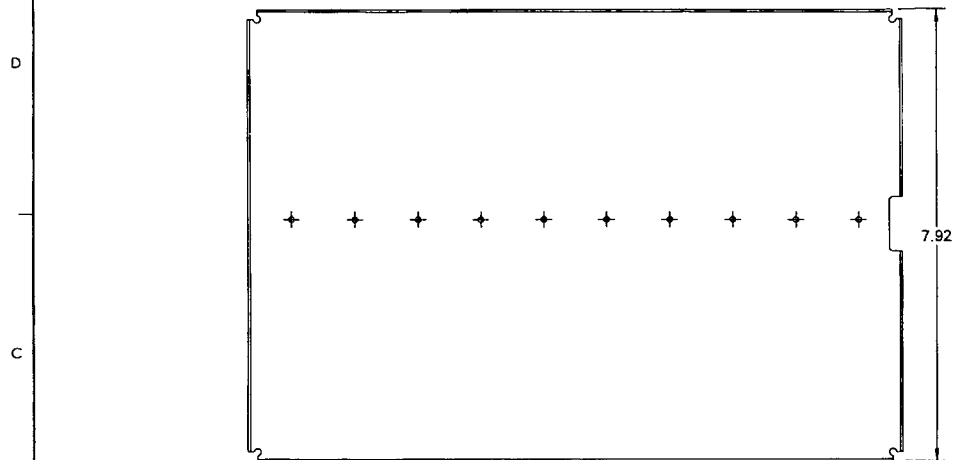
50068



**RELEASED**  
 2009-08-28  
*MD*

50068

8 7 6 5 4 3 2 1



**D3936-3 BOTTOM**  
MADE FROM D3936-3F

**NOTES:**

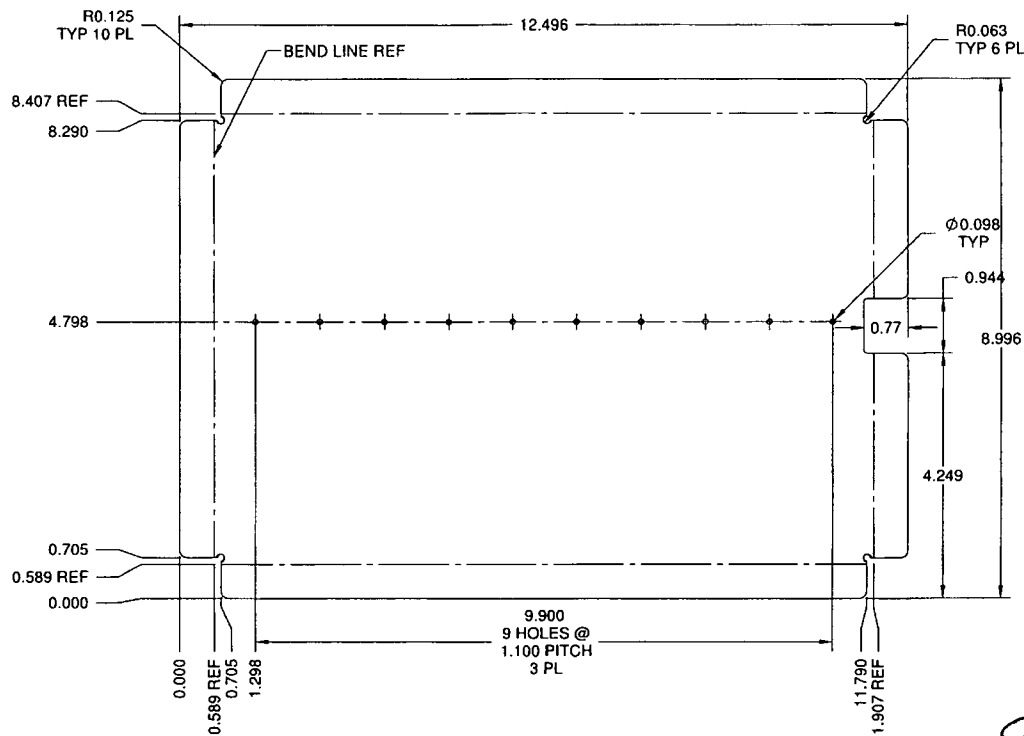
- 1) MATERIAL: MADE FROM D3936-3F
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.43 lbs

DESIGN	JS	<b>DART AEROSPACE LTD</b>	
DRAWN	JS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	JS	DRAWING NO.	REV. A
MFG. APPR.	JS	<b>D3936</b>	SHEET 4 OF 7
APPROVED	JS	TITLE	SCALE
DE APPR.	JS	<b>MAPBOX</b>	NTS
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**RELEASED**  
2009-08-28  
M

50068

8 7 6 5 4 3 2 1









**D3936-3F BOTTOM FLAT PATTERN**

50068

**RELEASED**  
2009-08-28  
NP

**NOTES:**

- 1) MATERIAL: 6061-T6 (OR 6061-T62) ALUMINUM SHEET 0.040 THICK  
PER AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027  
(REF DART SPEC M6061T6S.040)
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.43 lbs

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED	 ALS	DRAWING NO.	REV. /
MFG. APPR.		D3936	SHEET 5 OF
APPROVED		TITLE	SCALE
DE APPR.		MAPBOX	NTS
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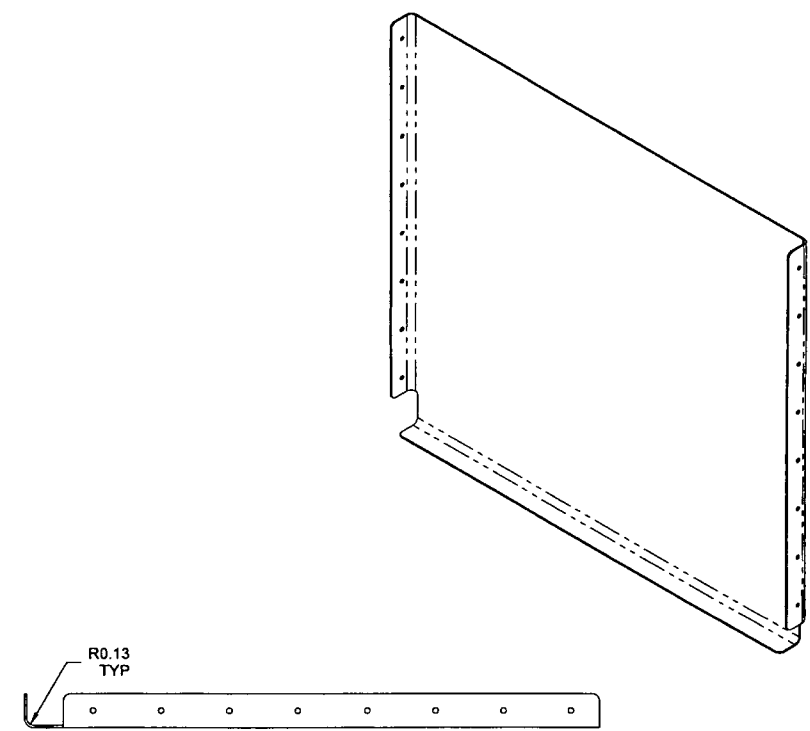
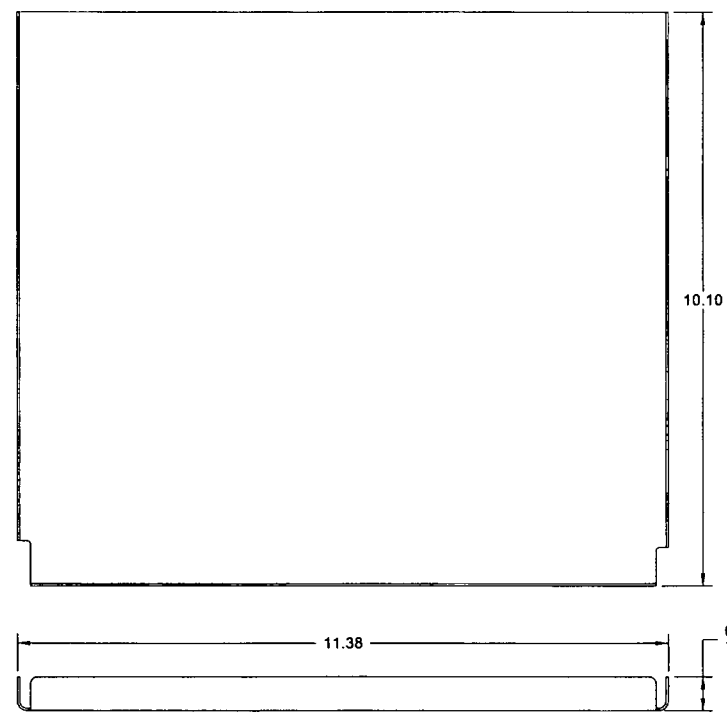
8 7 6 5 4 3 2 1

D

C

B

A



**D3936-5 DIVIDER**  
MADE FROM D3936-5F

- NOTES:**
- 1) MATERIAL: MADE FROM D3936-5F
  - 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: N/A
  - 7) WEIGHT: 0.50 lbs

50068  
**RELEASED**  
2009-08-28

DESIGN	<del>BF</del>	<b>DART AEROSPACE LTD</b>	
DRAWN	<del>BF</del>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<del>BF</del>	DRAWING NO.	REV. A
MFG. APPR.	<del>BF</del>	D3936	SHEET 6 OF 7
APPROVED	<del>BF</del>	TITLE	SCALE
DE APPR.	<del>BF</del>	MAPBOX	NTS
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8 7 6 5 4 3 2 1



